

# Delaware Renewable Energy Taskforce

Wednesday, September 7, 2016

9:30 a.m. to 12:00 noon

Public Service Commission Hearing Room

861 Silver Lake Boulevard, Suite 100,

Dover DE, 19901

## Meeting Minutes

Members and alternates:

Rob Underwood, Acting Chair, DNREC Division of Energy & Climate	Present
Tom Noyes, DNREC Division of Energy & Climate (Alternate)	Present
Glenn Moore, Delmarva Power	Present
Dale Davis, Delaware Solar Energy Coalition	Present
Finn McCabe, Delaware Solar Energy Coalition (Alternate)	Absent
Pam Knotts, Public Service Commission	Present
Lyris Cullinan, DuPont, Renewable energy research & development industry	Absent
Dave Holleran, Local renewable energy manufacturing industry	Present
Mark Nielsen, Delaware Electric Cooperative (Alternate)	Present
Scott Lynch, Delaware Municipal Electric Companies (Alternate)	Present
David Bonar, Public Advocate	Absent
Andrea Maucher, Public Advocate (Alternate)	Present
John Sykes, Environmental advocacy organizations	Present
Jim Black, Environmental advocacy organizations (Alternate)	Absent
Senator Harris McDowell, Sustainable Energy Utility	Absent
Tony DePrima, Sustainable Energy Utility (Alternate)	Present

Also present:

Kevin Quilliam and Lauren Siler, InClima

Bruce Burcat, MAREC

Bob Howatt and Matt Hartigan, PSC Staff

Dave Stevenson, consultant to the Public Advocate

Lyle Rawlings, Advanced Solar Products

Suzette Stewart, CNC Solar

Rob Underwood called the meeting to order at 9:30 a.m. The Taskforce reviewed the minutes from the August 27, 2016 meeting. Dave Holleran moved approval of the minutes. Glenn Moore seconded the motion. The minutes were approved unanimously.

Lauren Siler of InClima opened the review of the latest Solar Renewable Energy Credits (SREC) auction. Bids for 11,446 SRECs were accepted by Delmarva Power and Light (DPL). The N1, N2 and E2 tier was

undersubscribed. N2 and N3 were oversubscribed. DPL used its discretion to accept bids under \$100 in the pooled tier. Lower bids from N3 were used to fill the remainders of the N1, N2 and E2 tier. DPL accepted all remaining bids under \$95 to buy an additional 2,446 SRECs. Roughly 160 systems were bid into the auction for the first time. 649 systems that previously bid did not return for this auction.

Kevin Quilliam of InClime said the weighted average price for this auction was \$66.56.

Glenn Moore called it a quasi-robust auction, and noted that one major company did not submit bids.

Tony DePrima asked if the Sustainable Energy Utility (SEU) upfront SREC program should continue, noting that it was not intended to be permanent. He also said the program is intended for homeowners, not leasing and PPA companies. Scott Lynch asked if the SEU would sell some of the SRECs it has acquired. Tony De Prima replied that the SEU might sell SRECs into the PA market.

Kevin Quilliam said that upfront programs have higher administrative costs. Dale Davis said that the industry appreciates the impact of the SEU program.

Rob Underwood turned to the next item on the agenda, the DPL Green Energy Fund (GEF). Jessica Quinn provided an overview of the GEF, which has processed roughly 3,600 grants since 2002. The average system size funded this year is 7.6 kW. The GEF has changed its grant levels five times since 2009. The Division of Energy & Climate commissioned the Vermont Energy Investment Corporation (VEIC) to analyze grant levels and recommend changes in 2015. The VEIC report recommended incentive level changes through October, 2016.

Tom Noyes said the Division is reviewing the current grants based on an analysis of the grant applications from January through July of this year, focusing on metrics like rate of return, net present value and payback period. Dave Holleran asked if the effects of the different programs were being considered, Tom Noyes replied that the analysis includes consideration of the federal tax credit and current SREC prices.

Dale Davis said that installers look at all of the incentives together. Dave Stevenson said that a 6-7 year payback is critical to the industry. He also said that lower Green Energy Fund grants would lead to higher SREC prices. Tom Noyes said he wasn't sure there is a direct causation. Dale Davis said there is some effect. Glenn Moore said the  $R^2$  on this would be small; meaning the causation between grant levels and SREC prices would be small.

Rob Underwood said that the Division is working on revised GEF regulations, and mentioned that the Public Advocate has offered to review and provide comments on the draft regulations. Andrea Maucher said that the Public Advocate's interest is in reducing compliance costs.

Dave Stevenson offered what he called an alternative strawman that would include utility scale PV, use the output to replace RECs from out-of-state wind power. The SEU could buy SRECs and convert them to RECs according to a formula. Not including N4 systems has created an unbalance. These elements, taken together, would eliminate the need for the SREC auction as it has been structure for the last several years.

In this proposal, the GEF could buy upfront SRECs at \$0.85/SREC. No GEF grants would be offered to leasing companies, which instead could aggregate their SRECs and sell them to DPL. DNREC could administer the SRECs acquired through the GEF and charge utilities for the administrative costs.

Dale Davis said that some of this proposal would require legislation. Dave Stevenson said a way would be needed to use assumed SREC production instead of the current method.

Glenn Moore said the idea of upfront purchase of SRECs is interesting. We would need to consider the consequences in terms of carrying costs for purchases of SRECs used for compliance in future years. He pointed out that DPL's compliance timetable will require that another auction be run before legislation could likely be proposed and adopted. He also raised the concern that reliance on N4 SRECs would reduce the number of industry jobs in Delaware.

Dave Stevenson said that N4 systems will be economical largely on the benefit of the federal tax credit, and suggested that DPL could buy 5,000 SRECs from an N4 system. North Carolina has seen a number of larger systems built without selling SRECs.

Scott Lynch asked why not use the GEF to build one community solar project, referring to Newark's 230 kW McKee project as an example. Such a project could grow incrementally to N4 scale. Newark electric customers can buy shares and receive a monthly credit on their bills.

Dale Davis said the Newark installation is a good program but has decimated small scale solar in Newark. A similar project in DPL territory would require the company to own the project and sell it to customers.

Dave Stevenson referred to the 3:1 ratio provision (using 3 SRECs for 1 RECs) found in the code. Kevin Quilliam said that provision expired December 31, 2014. Dave Stevenson said legislation could revive the provision.

Dave Stevenson said that subsidies encourage higher prices. Dale Davis disagreed, saying people do buy on price. He mentioned soft costs, such as some jurisdictions requiring a structural study on a roof system.

Glenn Moore pointed out that DPL accountants will not allow the company to own generation assets. Tony DePrima said we have to proceed with a new auction and need to decide on what it will look like.

Tom Noyes suggested that a revised strawman proposal be structured to incorporate the ideas put on the table, even if those ideas require legislation.

Bruce Burcat of MAREC voiced his concern with the idea of displacing wind by using SRECs to meet REC requirements. Wind costs have come down 66 percent in the last five years. Using a REC/SREC multiplier would water down the RPS. Instead he says Delaware should increase the RPS.

Glenn Moore said that he would be open to using N4 SRECs and transition to using utility scale PV. He said it would take four to six months to consider the Public Advocate's ideas.

Dale Davis suggested an alternative of considering these ideas for 2018.

Andrea Maucher said the GEF could buy SRECs, and urged that new ideas not be put off.

Glenn Moore said we need to think about the GEF/SREC relationship and how SRECs might be administered.

Andrea Maucher said that using virtual SRECs could make it easier. Glenn Moore said that a three-year average could be used to calculate imputed SRECs.

Tom Noyes mentioned the issues raised by the Public Service Commission in approving the last SREC auction and said that the strawman could be set up with columns for 2017 and 2018 so the Taskforce can consider short-term and longer-terms ideas.

Rob Underwood opened the meeting up to comments from the public.

Lyle Rawlings spoke representing the Mid-Atlantic Solar Energy Industry Association (MA-SEIA). Regarding the Public Advocate's ideas, he said he agreed with some and disagreed with others. He did not agree that small PV should be eliminated from the auction or that the auction itself should be eliminated. He said that Delaware funds an efficient auction with costs less than half compared to New York and New Jersey. Small PV delivers value in decreasing line losses and avoided costs in terms of transmission upgrades. He mentioned the impact of small PV in Delaware on wholesale markets. He said we should continue to support small PV as benefiting the local business environment. He cautioned against using out-of-state PV from North Carolina, which benefits from a 35 percent state tax credit, which gives those installations an advantage over Delaware systems built with Delaware jobs.

Suzette Stewart of CNC Solar said the industry would benefit from simplifying things such as soft costs from unnecessary permits and engineering requirements. If the Taskforce were to consider community scale solar, it should start small. Glenn Moore said this is a balancing act between small and large, and North Carolina and local solar.

Rob Underwood adjourned the meeting at around 12 noon.